

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTADEG1625

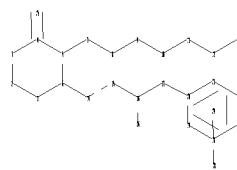
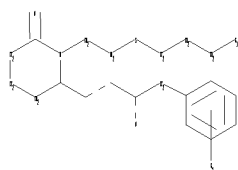
PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JAN 02	STN pricing information for 2008 now available
NEWS	3	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	4	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	5	JAN 28	MARPAT searching enhanced
NEWS	6	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	7	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	8	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	9	FEB 08	STN Express, Version 8.3, now available
NEWS	10	FEB 20	PCI now available as a replacement to DPCI
NEWS	11	FEB 25	IFIREF reloaded with enhancements
NEWS	12	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	13	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS	14	MAR 31	IFICDB, IFIPAT, and IFIUIDB enhanced with new custom IPC display formats
NEWS	15	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS	16	MAR 31	CA/CAPplus and CASREACT patent number format for U.S. applications updated
NEWS	17	MAR 31	LPCI now available as a replacement to LDPCI
NEWS	18	MAR 31	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	19	APR 04	STN AnaVist, Version 1, to be discontinued
NEWS	20	APR 15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS	21	APR 28	EMBASE Controlled Term thesaurus enhanced
NEWS	22	APR 28	IMSRESEARCH reloaded with enhancements
NEWS	23	MAY 30	INPAFAMDB now available on STN for patent family searching
NEWS	24	MAY 30	DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option
NEWS	25	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS	26	JUN 06	KOREAPAT updated with 41,000 documents
NEWS	27	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS	28	JUN 19	CAS REGISTRY includes selected substances from web-based collections
NEWS	29	JUN 25	CA/CAPplus and USPAT databases updated with IPC reclassification data
NEWS	30	JUN 30	AEROSPACE enhanced with more than 1 million U.S. patent records
NEWS	31	JUN 30	EMBASE, EMBAL, and LEMBASE updated with additional options to display authors and affiliated





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chain nodes :
7  8  9  10  11  12  13  14  15  16  17  25  26  28
ring nodes :
1  2  3  4  5  6  18  19  20  21  22  23
chain bonds :
4-25  5-7  6-14  7-8  8-9  9-10  10-11  11-12  12-13  14-15  15-16  16-17  16-26
17-20
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  18-19  18-23  19-20  20-21  21-22  22-23
exact/norm bonds :
1-2  1-6  2-3  3-4  4-5  4-25  5-6  12-13  14-15  16-26
exact bonds :
5-7  6-14  7-8  8-9  9-10  10-11  11-12  15-16  16-17  17-20
normalized bonds :
18-19  18-23  19-20  20-21  21-22  22-23

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G1:C,S,P

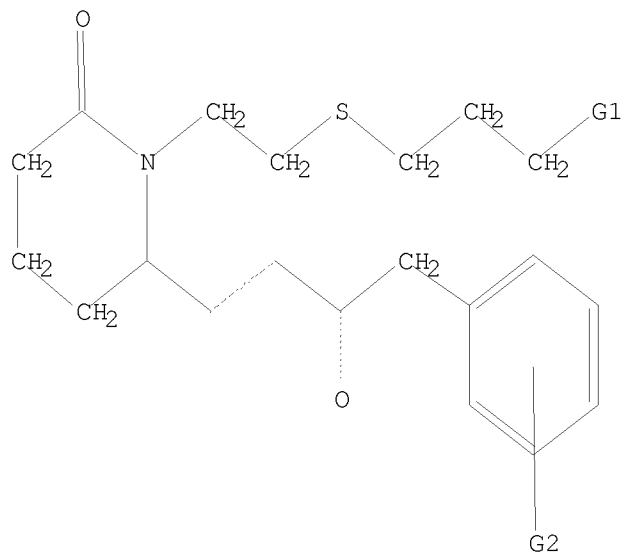
G2:C,O,N

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Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:Atom
19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 25:CLASS 26:CLASS 28:CLASS 29:Atom

```

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=> d l1
L1 HAS NO ANSWERS
L1 STR
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G1 C, S, P  
G2 C, O, N

Structure attributes must be viewed using STN Express query preparation.

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=> s l1 sss full
FULL SEARCH INITIATED 11:03:07 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 342 TO ITERATE
```

100.0% PROCESSED 342 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

L2 1 SEA SSS FUL L1

```
=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 178.82 179.03
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FILE 'CAPLUS' ENTERED AT 11:03:13 ON 15 JUL 2008  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

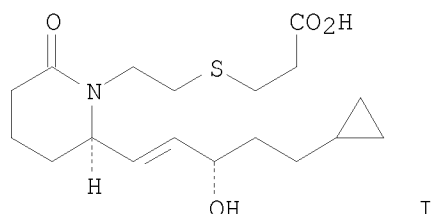
<http://www.cas.org/legal/infopolicy.html>

=> s 12

L3 2 L2

=> d 13 1-2 abs ibib hitstr

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN  
GI



AB 2-Piperidones, e.g., I, were prepared bearing heptanoic acid or a thioether heptanoic acid at the 1-position as well as appropriately substituted at the 6-position to mimic the structure of prostaglandins. The stereochem. purity at the 6-position was determined to be  $\geq 95\%$  ee for an advanced synthetic intermediate. The 2-piperidones were identified as potent agonists at the EP4 prostanoid receptor. They displayed a high affinity ( $K_i$  5-130 nM) at EP4 and subtype selectivity.

ACCESSION NUMBER: 2005:378879 CAPLUS

DOCUMENT NUMBER: 143:59790

TITLE: Lactams as prostanoid receptor ligands. Part 4:  
2-Piperidones as selective EP4 receptor agonists

AUTHOR(S): Elworthy, Todd R.; Brill, Emma R.; Caires, Christopher C.; Kim, Woongki; Lach, Leang K.; Tracy, Jahari Laurant; Chiou, San-San

CORPORATE SOURCE: Roche Palo Alto, Department of Medicinal Chemistry, Palo Alto, CA, 94304-1397, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2005), 15(10), 2523-2526  
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:59790

IT 724705-74-2P

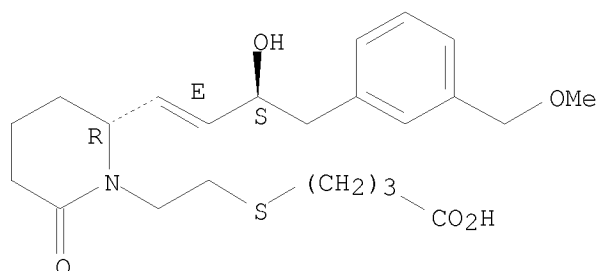
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(stereoselective preparation and EP4 receptor binding affinity of piperidones starting from aminoadipic acid using resolution as the key step)

RN 724705-74-2 CAPLUS

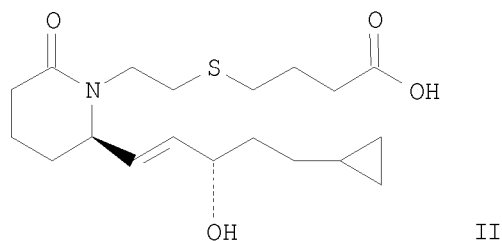
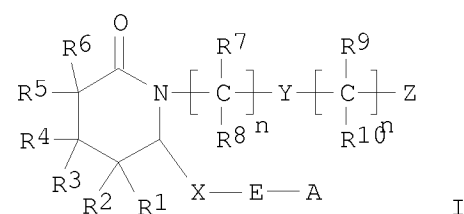
CN Butanoic acid, 4-[[2-[(2R)-2-[(1E,3S)-3-hydroxy-4-[3-(methoxymethyl)phenyl]-1-buten-1-yl]-6-oxo-1-piperidinyl]ethyl]thio]- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN  
GI



AB 2-Piperidone derivs. I ( $n = 0-4$ ; A = alkyl, aryl, heteroaryl, arylalkyl, arylcycloalkyl, cycloalkylalkyl, aryloxyalkyl; E = CHOH, or C(O); Y = CH<sub>2</sub>, CH:CH, arylene, heteroarylene, O, S(O)<sub>p</sub> ( $p = 0-2$ ), NR<sub>a</sub> (R<sub>a</sub> = H, alkyl); Z = CH<sub>2</sub>OH, CHO, tetrazole-5-yl, COOR<sub>b</sub> (R<sub>b</sub> = H, alkyl); R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub> = H, alkyl) and pharmaceutically acceptable salts, solvates, prodrugs, single isomers or racemic or non-racemic mixture of isomers thereof were prepared as selective prostaglandin EP<sub>4</sub> agonists for the treatment of associated diseases. Thus, 6R-(1-ethoxy-ethoxymethyl)piperidin-2-one was treated with NaH, and 2-bromoethanol triisopropylsilyl ether, followed by pyridinium p-toluene sulfonic acid to give the alc. The alc. was oxidized to the aldehyde using Swern conditions, and treatment of the aldehyde with (4-cyclopropyl-2-oxobutyl)phosphonic acid di-Me ester gave the alkene. Reduction of the ketone

using (R)-2-methyl-CBS-oxazaborolidine followed by deprotection of the silylether gave the primary alc. Treatment of the alc. with  $\gamma$ -thiobutyrolactone gave the Me ester which was treated with NaOH to give the desired II. The invention also provides methods for preparing, compns. comprising, and methods for using compds. of formula I.

ACCESSION NUMBER: 2004:589253 CAPLUS  
DOCUMENT NUMBER: 141:123513  
TITLE: 2-piperidone derivatives as prostaglandin agonists  
INVENTOR(S): Elworthy, Todd Richard  
PATENT ASSIGNEE(S): Roche Palo Alto LLC, USA  
SOURCE: U.S. Pat. Appl. Publ., 26 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040142969	A1	20040722	US 2004-754117	20040108
US 7271183	B2	20070918		
AU 2004203905	A1	20040729	AU 2004-203905	20040102
CA 2511255	A1	20040729	CA 2004-2511255	20040102
WO 2004063158	A1	20040729	WO 2004-EP8	20040102
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ				
EP 1585729	A1	20051019	EP 2004-700041	20040102
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2004006717	A	20051220	BR 2004-6717	20040102
CN 1735597	A	20060215	CN 2004-80002071	20040102
JP 2006515015	T	20060518	JP 2005-518636	20040102
RU 2311409	C2	20071127	RU 2005-125284	20040102
IN 2005CN01522	A	20080404	IN 2005-CN1522	20050705
MX 2005PA07341	A	20050930	MX 2005-PA7341	20050706
KR 752891	B1	20070828	KR 2005-712774	20050708
US 20080058375	A1	20080306	US 2007-895386	20070824
PRIORITY APPLN. INFO.:			US 2003-439152P	P 20030110
			WO 2004-EP8	W 20040102
			US 2004-754117	A1 20040108

OTHER SOURCE(S): MARPAT 141:123513

IT 724705-74-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

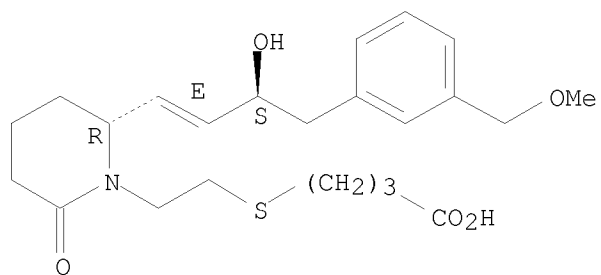
(preparation of 2-piperidone derivs. as selective prostaglandin EP4 agonists for the treatment of associated diseases)

RN 724705-74-2 CAPLUS

CN Butanoic acid, 4-[[2-[(2R)-2-[(1E,3S)-3-hydroxy-4-[3-(methoxymethyl)phenyl]-1-buten-1-yl]-6-oxo-1-piperidinyl]ethyl]thio]- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

STN INTERNATIONAL LOGOFF AT 11:04:22 ON 15 JUL 2008